REMARKS

[0007] Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 1, 3-19, 21-25, 27, 28, 30, 32, 33, 36 and 37-43 are presently pending. Claims amended herein are 9, 25, 30, 32, and 36. No claims are withdrawn or cancelled herein. New claims added herein are 37-43.

Formal Request for an Interview

[0008] If the Examiner's reply to this communication is anything other than allowance of all pending claims and there only issues that remain are minor or formal matters, then I formally request an interview with the Examiner. I encourage the Examiner to call the undersigned representatives for the Applicant so that we can discuss this matter so as to resolve any outstanding issues quickly and efficiently over the phone.

[0009] Please contact us to schedule a date and time for a telephone interview that is most convenient for both of us. While email works great for us, we welcome your call as well. Our contact information may be found on the last page of this response.

Allowable Subject Matter

[0010] Applicant would like to thank the Examiner for allowing claims 17-19, 21-24 and 33. These claims have not been amended herein, and therefore remain allowable.

Claim Amendments and Additions

[0011] Without conceding the propriety of the rejections and in the interest of expediting prosecution, Applicant amends claims 9, 25, 30, 32, and 36 herein. Applicant amends claims to highlight claimed features. Such amendments are made to expedite prosecution, and should not be construed as further limiting the claimed invention in response to the cited references.

[0012] Claim 9 is amended solely to correct its dependency to claim 1 rather than previously cancelled claim 2.

[0013] Claims 25 and 30 are amended to include allowed subject matter from claim 17.

[0014] Applicant adds new claims 37-43 herein, which are directed toward subject matter from the allowed claims that depend on claim 17. Specifically, claims 37 and 40 include subject matter from allowed claim 19; claims 38 and 41 include subject matter from allowed claim 21; claim 39 and 42 include subject matter from allowed claim 22; and claim 43 includes subject matter from allowed claim 23.

Formal Matters

Claims

[0015] The Examiner objected to claim 9 for its dependency on cancelled claim 2. Applicant amends claim 9, as shown above, to address the objection made by the Examiner, and to expedite prosecution.

Substantive Matters

Claim Rejections under § 103

[0016] Claims 1, 3-16, 25, 27, 28, 30, 32 and 36 are rejected under 35 U.S.C. § 103. In light of the amendments presented herein and the discussion during the above-discussed Examiner interview, Applicant submits that the rejections to claims 25, 27, 28, 30, 32 and 36 are moot. Accordingly, Applicant asks the Examiner to withdraw these rejections.

[0017] In addition, the Examiner rejects claims 1, 3-16, under § 103. For the reasons set forth below, the Examiner has not made a prima facie case showing that the rejected claims are obvious.

[0018] Accordingly, Applicant respectfully requests that the § 103 rejections be withdrawn and the case be passed along to issuance.

[0019] The Examiner's rejections are based upon the following references either alone or in combination:

- **Itokawa:** *Itokawa,* US Patent Application Publication No. 2001/0033620 (Published October 25, 2001);
- **Harville:** *Harville, et al.,* US Patent Application Publication No. 2005/0005025 (Published January 6, 2005);
- **Huang:** *Huang, et al.*, US Patent No. 6,016,166 (issued January 18, 2000);
- **Negishi:** *Negishi,* US Patent No. 6,717,891 (issued April 6, 2004);

- **Brown:** *Brown,* US Patent Application Publication No. 2003/0210251 (Published November 13, 2003);
- **Hurst, Jr.:** Hurst, Jr., US Patent No. 6,034,731 (issued March 7, 2000);
- **Dunbar:** *Dunbar, et al.,* US Patent Application Publication No. 2004/0268397 (Published December 30, 2004); and
- **Wang:** *Wang,* US Patent No. 7,116,743 (issued October 3, 2006.

Overview of the Application

[0020] The Application describes a computer-implemented method, an apparatus, and computer-readable media for processing video data.

Cited References

[0021] The Examiner cites Itokawa as the primary reference in the obviousness-based rejections. During the interview we also discussed the Huang et al., Negishi et al., and Wang with Examiner as secondary references in the remaining obviousness-based rejections to claims 1 and 3-16.

Itokawa

[0022] The Itokawa is directed to keeping the frame rate constant, while reducing the image quality of the video data. Similarly, in paragraph [0126] the decoding apparatus of the second embodiment always manages the image quality

of a frame to be decoded and always generates an image with a predetermined or higher image quality.

Haung et al

[0023] The Haung et al reference is directed to correction of data lags between audio data and video data during playback, i.e. it describes a solution to a "lip-synch" problem rather than using a smoothing function to vary video frame rates to recover from video playback timing lags.

Negishi et al

[0024] The Negishi et al reference does not appear to address this claimed feature, either. Instead, Negishi describes a device and method for estimating and locating the position of desired audiovisual data rather than varying playback timing to recover from video playback timing lags.

Obviousness Rejections

Lack of *Prima Facie* Case of Obviousness (MPEP § 2142)

[0025] Applicant disagrees with the Examiner's obviousness rejections. Arguments presented herein point to various aspects of the record to demonstrate that all of the criteria set forth for making a prima facie case have not been met.

[0026] "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. . . . KSR Int'l Corp. v. Teleflex, Inc., Slip Op. at 14 (U.S. Apr. 30, 2007) (quoting In re

Kahn, 441 F. 3d 977, 988 (CA Fed. 2006)). A factfinder should be aware, or course, of the distortion caused by hindsight bias and must be cautious of argument reliant upon *ex post* reasoning," Id., Slip Op. at 17, *See also* Graham v. John Deere Co., 383 U.S. at 36, 148 USPQ at 474.

[0027] Applicant submits that Examiner has not identified some suggestion, teaching, or reason from the cited references themselves (or from the knowledge of one of ordinary skill in the art at the time of the invention) that would have led one of ordinary skill in the art at the time of the invention (hereinafter, "OOSA") to combine the disclosures of the cited references in the manner claimed. More specifically, there is no reason to combine because:

- the cited art does not suggest the desirability of the claimed invention;
- the Examiner has not provided any objective and particular evidence showing why OOSA would be motivated to combine the teachings of the references;
- the cited art does not disclose all of the features of the claims; and
- the teaching of the cited art conflicts and teaches away from the combination.

Independent Claim 1

[0028] The Examiner rejects claims 1, 3, 16 under 35 U.S.C. § 103(a) as being unpatentable over Itokawa in view of Harville. Applicant respectfully

traverses the rejection of these claims and asks the Examiner to withdraw the rejection of these claims.

[0029] Applicant submits that the combination of Itokawa and Harville does not teach or suggest at least the following features as recited in this claim (with emphasis added):

determining an ideal playback timing associated with the video data, ...; and

if an actual playback timing of the video data lags the ideal playback timing, the lag resulting from a limited processing power of the computer implementing the method, *varying* a frame rate associated with the video data using a smoothing function to recover toward the ideal playback timing, wherein smoothly *varying* the frame rate includes controlling the frame rate using a frame-dropping algorithm that drops frames in the video data in accordance with the smoothing function.

[0030] The Examiner indicates (Action, p. 3, 4) the following with regard to this claim:

Regarding **claim 1**, Itokawa discloses a computer-implemented (para 0171) method for processing video data (para 0110) comprising:

determining an ideal playback timing associated with the video data, the ideal playback timing determined at least in part by way of information encoded in the video data (fig 3 A, B and C and fig 18 A, para 0109 illustrates ideal playback timing and information encoded in video data) and

if an actual playback timing of the video data lags the ideal playback timing, the lag resulting from a limited processing power of the computer implementing the method varying a frame rate associated with the video data using a smoothing function to recover toward the ideal playback timing (the second embodiment demonstrates the entire process para 0118 thru para 0126. Specifically fig 19A and B illustrate the lag due to limited processing power and figs 22 and 31 and para 0125 illustrate varying frame rate to achieve smoothing function to recover towards ideal playback timing) wherein

smoothly varying the frame rate includes controlling the frame rate (para 0115, smooth motion)

With respect to Harville et al. at p. 4, the Examiner states:

On the other hand Harville et al teaches controlling the frame rate using a frame-dropping algorithm that drops frames in the video data in accordance with the smoothing function (para 0179)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate controlling the frame rate using a frame-dropping algorithm that drops frames in the video data in accordance with the smoothing function.
as taught by Harville et al in the system of Itokawa in order to inform each service node assigned to perform a media service component of the plurality of media services components enabling the streaming media service to be performed on a streaming media.

Cited Reference Conflict and Teach Away from the Combination

[0031] The Examiner admits that Itokawa does not teach "controlling the frame rate using a frame dropping algorithm that drops frames in the video data in accordance with the smoothing function", as recited in this claim. The Examiner therefore relies on Harville, which teaches that buffering, flow control, and frame–dropping policies can be implemented by Ears to smooth data rate mismatches between delivery and processing of the streaming media. On page 4 of the Action, the Examiner states that it would be obvious to "incorporate controlling the frame rate using a frame-dropping algorithm that drops frames in the video data in accordance with the smoothing function as taught by Harville et al. in the system of Itokawa in order to inform each service node assigned to perform a media service component of a plurality of media services components enabling the streaming media service to be performed on a streaming media."

[0032] Without conceding that any of the purported combinations are proper, particularly, Applicant disputes that the purported modification of Itokawa with Harville et al. would have made the rejected claims obvious to one of ordinary skill in the art at the time of the invention. At p. 4 of the Action, the Examiner suggests that the motivation to combine the teaching of these references is "in order to inform each service node assigned to perform a media service component of a plurality of media services components enabling the streaming media service to be performed on a streaming media" utilized in Harville's approach. Applicant disagrees that this combination would have made the rejected claims obvious at least because Itokawa reference conflicts with and teaches away from the combination.

[0033] Applicant submits that Itokawa never teaches, discloses, suggests or hints at any need to vary the frame rate during video playback at a selected playback speed. Rather, Itokawa teaches degrading the image quality, of a frame so that the number of frames to be played back does not decrease. [0115] and [0116]. Indeed, according to Itokawa, the decoding apparatus of the second embodiment always manages the image quality of a frame to be decoded and always generates an image with a predetermined or higher image quality. [0126]. Accordingly, the disclosure in Itokawa would teach away from the need for "controlling the frame rate using a frame dropping algorithm that drops frames in the video data in accordance with the smoothing function." Where the disclosure of Itokawa teaches away from a need for frame dropping, the Examiner's reliance on Harville et al. presents a case of hindsight reconstruction to arrive at the combination cited to reject this claim.

[0034] For the foregoing reasons, Applicant submits that these references express no reason to combine their teachings. Accordingly, OOSA would have no motivation to combine the teachings of the cited references.

[0035] Accordingly, the Applicant therefore respectfully asks the Examiner to withdraw the rejection of these claims.

Cited Reference Express No Motivation to Combine

[0036] Applicant submits OOSA would have no motivation to combine the teachings of Itokawa with Harville et al. because neither reference expresses a reason to combine the teachings of these references, either explicitly or implicitly. At p. 4 of the Action, the Examiner suggests that the motivation to combine the teaching of these references is "in order to inform each service node assigned to perform a media service component of a plurality of media services components enabling the streaming media service to be performed on a streaming media" utilized in Harville's approach.

[0037] Furthermore, Applicant respectfully submits that the Examiner has not met the Office's burden in showing a motivation to combine Itokawa and Harville et al. More specifically, the Examiner has not identified any objective and particular evidence found in the cited references that show why OOSA would be motivated to combine the teachings of the two cited references.

[0038] The Examiner has not identified any specific portion of the cited references as being objective and particular evidence that would have motivated OOSA to look towards the teachings of the other to produce the combination of

references that the Examiner proposes. Applicant respectfully submits that the Examiner cannot maintain this obviousness-based rejection without pointing out, with particularity, the specific portions of the cited references that would have motivated OOSA to look towards the teachings of the other to produce the combination of references that the Examiner proposes.

[0039] For the foregoing reasons, Applicant submits that the Examiner has not met the Office's burden in showing objective evidence to combine references. Accordingly, OOSA would have no motivation to combine the teachings of cited references.

[0040] In sum, Applicant submits that there is no suggestion, teaching, or reason given by one reference that would motivate OOSA to combine it with the teachings of the other reference. More specifically, there is no motivation to combine because the combination of references is contrary to the intended function of Itokawa, which is directed to degrading image quality to obtain a selected playback rate; no motivation exists in the references themselves to make the combination; and the Examiner has not provided any objective and particular evidence showing why OOSA would be motivated to combine the teachings of the two references. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Dependent Claims 3-16

[0041] These claims ultimately depend upon Independent claim 1. As discussed above, claim 1 is allowable over the cited references. It is axiomatic that any dependent claim which depends from an allowable base claim is also

allowable over the cited references. Additionally, some or all of these claims may also be allowable for additional independent reasons.

Dependent Claim 4

[0042] Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Itokawa in view of Harville et al and still further in view of Haung et al.

[0043] At page 5 of the Action, the Examiner admits that "the combination of Itokawa and Harville et al. do not disclose wherein the threshold value accounts for ordinary system variations." The Examiner relies on Huang et al. for teaching "wherein the threshold value accounts for ordinary system variations." As with the rejection to claim 1, Applicant submits that Examiner has not identified some suggestion, teaching, or motivation from the cited references themselves (or from the knowledge of one of ordinary skill in the art) that would have led one of ordinary skill in the art at the time of the invention (hereinafter, "OOSA") to combine the disclosures of the cited references in the manner claimed.

[0044] More specifically, there is no motivation to combine because the proposed modification changes the principle of operation of the Itokawa, which teaches degrading the image quality, of a frame so that the number of frames to be played back does not decrease. [0115] and [0116]. Indeed, according to Itokawa, the decoding apparatus of the second embodiment always manages the image quality of a frame to be decoded and always generates an image with a predetermined or higher image quality. [0126].

[0045] Moreover, the Huang et al reference is not concerned with controlling image quality during playback, rather, the teachings of Huang et al. cited by the Examiner are directed to a description of a "lip-synch" problem, that is, a lack of synchronization between audio data and video data during playback. Col. 4, lines 54-67.

[0046] For the foregoing reasons, Applicant submits that neither the Itokawa nor the Huang et al. reference expresses a reason to combine their teachings. Accordingly, OOSA would have no motivation to combine the teachings of the cited references.

Dependent Claims 5-8

[0047] Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itokawa in view of Harville et al and still further in view of Nigishi et al.

[0048] At pages 6-8 of the Action, the Examiner admits that "the combination of Itokawa and Harville et al. do not disclose the following elements: (from claim 5) "wherein the delay is computed by subtracting the ideal playback timing from the actual playback timing;" (from claim 6) "wherein the smoothing function incorporates the delay as a variable;" (from claim 7) "wherein the delay is computed as an average delay that includes an average of the delay associated with a current frame of the video data and at least a delay associated with a previous frame;" and (from claim 8) "wherein the average delay is an average of delays associated with the current frame and a plurality of previous frames;" ."

[0049] At pages 6-8 of the Action, the Examiner then relies on Nigishi et al. for teaching these missing elements. However, as discussed during the interview with the Examiner, Nigishi et al. is not directed to delays associated with the playback of video data. Rather, Nigishi et al. discloses estimating and locating the position or sector of desired data for playback, the position of which corresponds to a time in the data selected by the user. Accordingly, the differences referred to in Nigishi et al. between the actual playback time and the desired playback time do not correspond to timing delays in the data. Instead, the differences between the actual playback time and the desired playback time relate to the differences in position for the recorded information. Accordingly, the cited art does not disclose all of the features of the claims.

[0050] As shown above, the combination of Itokawa, Harville et al. and Nigishi et al. does not teach or suggest all of the elements and features of these claims. Also, there is no reason to combine the teachings of the references. Moreover, Applicant submits that Examiner has not identified some suggestion, teaching, or motivation from the cited references themselves (or from the knowledge of one of ordinary skill in the art) that would have led one of ordinary skill in the art at the time of the invention (hereinafter, "OOSA") to combine the disclosures of the cited references in the manner claimed. Accordingly, Applicant asks the Examiner to withdraw the rejections as to claims 5-8.

Dependent Claims

[0051] In addition to its own merits, each dependent claim is allowable for the same reasons that its base claim is allowable. Applicant requests that the Examiner withdraw the rejection of each dependent claim where its base claim is allowable.

Conclusion

[0052] All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the **Examiner is urged to contact me before issuing a subsequent Action**. Please call or email me at your convenience.

Respectfully submitted,

Dated: December 23, 2008

By: /Brendan E. Squire 48,749/

Brendan E. Squire
Reg. No. 48,749
509-944-4755
brendan@leehayes.com

Beatrice L. Koempel-Thomas
Reg. No. 58213
509-944-4759
bea@leehayes.com

Assistant: Cherri Simon
509-944-4776
cherri@leehayes.com

www.leehayes.com